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**RESOURCE RESTRICTION  
AS A DETERMINANT OF REGIONAL POLICY FORMATION  
UNDER THE CONDITIONS OF UKRAINE POST-WAR  
RECONSTRUCTION**

The full-scale war initiated by the Russian Federation against Ukraine in February 2022 is in an active phase, making it impossible to conduct a comprehensive assessment of the economic state of the country's regions at the present moment. However, it is evident that the existing damage to industrial capacities, infrastructure, and agricultural lands imposes significant constraints on the development of regions and serves as a prerequisite for planning their post-war reconstruction.

In the conditions created in Ukraine due to active hostilities, resource limitations acquire not only the nature of exhaustion inherent to them by definition but also the impossibility of utilizing available resources in the regions. Primarily, this situation is determined by the substantial contamination of the country's territory with ammunition and the destruction of the corresponding infrastructure directly linked to the extraction and processing of certain types of natural resources. Thus, these limitations dictate the formation of regional policies in Ukraine and require a detailed study for a clearer definition of tasks and objectives for the future policy of recovery and development of the regions.

According to Forbes Ukraine calculations, the total value of surveyed natural resource reserves in Ukraine is up to \$15 trillion USD. The authors considered major minerals such as coal, granite, iron ore, rock salt, oil shale, potash salts, brown coal, apatite ores, manganese ores, peat, clays, natural gas, phosphorite ores, graphite ores, sulfur, oil, gas condensate, uranium, lithium ores, copper ores, lead-zinc ores, and germanium. Coal constitutes 62% of the total value of minerals, iron ore 14%, with each of the remaining assets contributing less than 5%. More than 70% of this value is concentrated in the Luhansk, Donetsk, and Dnipropetrovsk regions [1]. Currently, almost the entire territory of Luhansk and more than half of Donetsk regions is under the occupation of the Russian Federation. The experience of de-occupation in northern regions of Ukraine and the right bank of the Kherson region indicates a high intensity of landmines in the territory occupied by Russian

forces. This allows assumptions that other currently occupied regions will face a similar situation.

According to the State Emergency Service of Ukraine (SESU), as of now, 174,000 km<sup>2</sup> or approximately 30% of Ukraine's territory remains potentially hazardous in terms of ammunition contamination [2]. The analytical portal "Slovo i Dilo" estimates the area of mined territories to be between 170,000 and 180,000 km<sup>2</sup> or 30–40% of Ukraine's territory. According to their data, Kherson is the most contaminated region. SESU pyrotechnic units have been most active in the Kharkiv, Kyiv, Chernihiv, Donetsk, Mykolaiv, and Sumy regions, and the full demining of Ukraine's territory may take more than 5 years [3]. The Ministry of Ecology reports that approximately 3 million hectares of forests, nearly a third of Ukraine's forested area, have been damaged due to Russian aggression. About 500,000 hectares are under occupation or in conflict zones [4].

The Kyiv School of Economics conducted an assessment of the damages inflicted on Ukraine's infrastructure during one year of resistance against Russian aggression. According to their calculations, by February 2023, the infrastructure incurred losses of \$143.8 billion USD in terms of replacement value. Specifically, within a year of the full-scale invasion, over 25,000 km of roads and 344 bridges and viaducts were damaged. The losses to the energy system and the agro-industrial complex amount to \$8.1 billion and \$8.7 billion USD, respectively [5].

Given the existing conditions, in 2022, the Center for Economic Policy Research proposed a plan for the recovery of regional economies consisting of four stages:

1) Damage Minimization: This stage may occur during active combat and involves evacuating economic entities to safer areas and demining the territory.

According to the experts at the Center, the implementation of the subsequent stages will take place after the cessation of hostilities:

2) Documentation of Damages for Subsequent Capital Expenditure Calculations;

3) Restoration of Critical Infrastructure, including logistical chains;

4) Overall Economic Recovery and Growth.

Following this plan, the recovery of the Kyiv region took place after its de-occupation in the spring of 2022 [6]. This plan remains relevant for other regions of Ukraine temporarily occupied by the Russian Federation and will be applied after their liberation.

Therefore, with the restoration of Ukraine's territorial integrity within internationally recognized borders, the economy of Ukrainian regions will find itself in a position where the full utilization of resources will not be possible without ensuring the security of development and reconstruction, at

least for critical infrastructure. After the final calculation of the direct and indirect losses resulting from the full-scale armed aggression of the Russian Federation on the economy of Ukraine's regions, unfortunately, questions will arise about the profitability of rebuilding many devastated economic entities, villages, and cities. This will lead to an increase in economic disparities between regions, particularly in terms of resource provisioning, and will require a balanced policy at the state, regional, and local levels regarding the planning of measures for the preservation and optimization of the use of labor, natural, financial, and other resources. In this context, the introduction of resource use efficiency assessments following European practices will be especially crucial.

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